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ABSTRACT

All sixth class pupils in 93 Irish primary schools were rated by their teachers as either having or not having problems related to literacy (in reading or writing). Teachers perceived 6.2% of pupils as being unable to cope with everyday demands in reading, while 6.6% were perceived as unable to cope with everyday demands in writing. A further 7% of pupils were perceived as being unable to cope with the reading demands of postprimary schooling, while 5.2% were perceived as being unable to cope with the writing demands of postprimary schooling. Fifty-nine percent of the pupils with disabilities were perceived as having them in both reading and writing. Children with disabilities tended to be older than other sixth class pupils, to score considerably lower on tests of verbal reasoning and English attainment, and to be rated by their teachers as lower than other pupils on personal-social characteristics, especially those related to school performance. (Author)

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INCIDENCE AND CORRELATES OF ILLITERACY IN IRISH PRIMARY SCHOOLS

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Problems related to the acquisition by children of skills in reading and writing have frequently been an object of concern in recent years -- in the media, among teachers and among members of the general public. Concern has been expressed about the effects of reading and writing disabilities on both pupils' ability to follow school courses and their ability to function in society. As far as school-work is concerned, the problem probably achieved increased visibility in this country with the transfer of an increasing number of pupils to post-primary school and with the raising of the school-leaving age.

Concern with problems of literacy is by no means new nor is it confined to this country. In fact, our current problems are probably small by comparison with those in the past and with those in developing countries. However, contemporary western societies remain conscious of the fact that their problems of literacy cannot be regarded as inconsiderable. While mass education no doubt has contributed to the reduction of such problems, an increase in the information and symbol processing requirements of post-industrial societies means that higher standards of literacy are required today than in the past if one is to function satisfactorily in work and everyday life. Besides, it may be that providing literacy skills for

the relatively small proportion of the population that remains illiterate under conditions of mass education may be a different and more intractable problem than providing such skills for the general population. It is not always appreciated that the modern expectation that nearly everyone should attain a high level of reading skill, enabling them to draw inferential as well as directly stated information from texts, is a new development and poses a unique challenge to contemporary societies and educational systems (5).

What we have said implies that the level of literacy required for functioning in society may vary from time to time and according to the demands of one's occupation. It is not surprising then that definitions of literacy in the literature vary; a single definition which would apply to all people of all ages in all countries and at all stages of economic development would not be possible. In an historical review, Resnick and Resnick (5) concluded that when the standard of literacy set is rather low (e.g., to read aloud a simple and well-known passage) one can expect a high incidence of literacy, while when the standard set is high (as when one must be able to read unfamiliar texts and obtain new information from them), relatively smaller numbers of people attain literacy.

Approaches to the definition and measurement of literacy may be categorized broadly under two headings. Firstly, there are those approaches which focus on functioning in daily life. Thus, for

example, in Britain, literacy has been defined as being 'able to read and write for practical purposes of daily life' (Great Britain: Ministry of Education, 1950). In the United States, a rather similar definition was operationalized in terms of competence in specific reading tasks; for example, 'to read and understand all sections of a newspaper, with particular emphasis on the classified and advertisement section; to read and understand voter registration instructions; to read labels or such household items as groceries, recipes, medicine instructions; to read materials necessary to perform jobs: to read personal letters, bills' (cf 4).

Side by side with such definitions based on functioning in daily life, educational criteria of literacy have also been widely used. The most frequently used criteria of this kind have been length of education or performance on standardized tests. In most cases, the standardized tests have been norm-referenced, and a score below a certain reading age (commonly seven years) has been used as an index of illiteracy.

In this paper, we shall look at measures of literacy that can broadly be defined as both functional and educational. Our concern is with the reading and writing abilities of children at the stage

when they are in their last year in primary school. We asked teachers of sixth standard children (aged 11½ to 12½ years) to nominate pupils in their class who were unlikely to be able to cope in their reading and writing (separately), firstly, with the everyday demands of our society, and secondly, with the demands of education in a post-primary school. Certain additional information was also available about the children--their performance on standardized tests of verbal ability and attainment in English, the type of school they were attending, their socio-economic background and ratings of aspects of their behaviour by teachers.

On the basis of this information we propose to examine two issues. Firstly, what is the incidence of the four states of illiteracy as perceived by teachers in the population of sixth-class pupils in Irish schools? And secondly, how do children rated as having literacy problems compare with children not so rated on a number of personal characteristics: verbal ability, standardized test performance in English, socio-economic status and school-related and more general personal-social characteristics?

METHOD

Sample

The population of Irish national schools (excluding private, Protestant, special and one-teacher schools) was stratified by location (urban-town-rural), size, sex composition and type of

administration (religious-lay). Within each stratum, schools were randomly selected. Altogether 128 schools were selected, and these were distributed across the seven sample strata as shown in Table 1.

INSERT TABLE 1 ABOUT HERE

The total number of national schools in the country in each of the categories represented in the sample is also shown in the table.

In a previously compiled file of pupil information, 3,930 pupils from the schools where all pupils had been rated by their own class teachers and had participated in a testing programme in the autumn of 1975 were located. These form the base group for the pupil analyses. Correct ages were available for 3,829 of these and ability test scores for 3,512. Because one group of schools did not take the English tests, attainment test results in English were available for only 2,450 of the pupils. Teacher ratings of personal characteristics of pupils were on file for between 3,201 and 3,218 pupils.

Towards the end of the school year 1975-76, field workers were instructed to ask every teacher of sixth class pupils in the selected schools to complete a brief questionnaire about standards of literacy in his/her classroom. Of 214 such teachers in the 126 schools

which had sixth classes, ratings were received directly from 158, that is about 74%. These teachers rated a total of 4,736 pupils or 73% of the 6,524 pupils in the school sample.*

For various analyses reported in this paper, different subsets of the total respondent sample were used. One such subset consisted of the schools in which all pupils were rated on literacy by their own class teachers. There were 96 such schools (of the 112 responding) in which 142 teachers rated some 4,199 pupils. Three of these schools were included in only a few analyses because their school type was not intended to be in the sample. Still further subsets consisted of those pupils for whom the various kinds of information besides the teacher ratings were available; this was so in analyses where individual pupils rather than schools were the focus of attention.

Instruments

Literacy Questionnaire. The Literacy Questionnaire was a document in which four lists of pupils' names were sought from teachers by directing them as follows:

1. Please name the pupils in your class who, in your opinion, if they were to leave school now, would not be able to cope with the everyday demands of our society in
   (a) reading (e.g., read notices, official forms, newspapers);
   (b) in writing (e.g., write letters, applications for jobs).

2. Please name the pupils in your class who, in your opinion, would not be able to cope with the demands of education in a post-primary school (a) in reading (e.g., read text-books); (b) in writing (e.g., write essays).

Standardized tests The ability test administered was the Drumcondra Verbal Reasoning Test (2) and the test of attainment was the Drumcondra English Test, Level III, Form A (1). Scores can be derived from the attainment test for reading vocabulary, reading comprehension, total reading (based on a combination of the vocabulary and comprehension subtest scores), language (measuring capitalization, punctuation, usage, and parts of speech), and spelling.

Ratings of personal characteristics of pupils Ratings on each pupil were obtained on a Pupil Evaluation Form completed by teachers. Each pupil was rated on a five-point scale (5 = very good, 4 = good, 3 = average, 2 = fair, 1 = poor) for the following personal-social characteristics: participation in class, behaviour in school, personal appearance and dress, attention span/concentration, persistence in school work, keenness to get on, speech/use of language, neatness in school work, manners/politeness, getting along with other children, working with limited supervision, and attendance. Teachers were also asked to indicate what kind of post-primary school they considered would be most suitable for each pupil -- secondary, vocational, or

comprehensive -- or whether he/she felt it was still too soon to make such a judgement. Finally, the teacher was asked to state the occupation of the pupil's father or guardian, giving sufficient detail to enable classification of occupational status to be made.

Procedure

The ability and attainment tests were administered to pupils during the first three months of the school year, 1975-76. The tests were administered to the pupils by their own teachers. Around the same time, and before the results of the tests were available to teachers, each teacher was asked to complete a Pupil Evaluation Form for each pupil in his/her class. The Literacy Questionnaire was given to teachers towards the end of the school year by a field worker; the questionnaire was completed in the presence of the field worker who was available to give assistance in interpretation.

INCIDENCE OF ILLITERACY

Since the school was the sampling unit in the study, it was appropriate to use a school level variable as a measure of the incidence or frequency of occurrence of each of the forms of illiteracy. The measure used was the proportion of all pupils in the school who were named by the rater(s) as having each of the four literacy problems defined in the literacy questionnaire. Pupils who were rated as having

a problem with reading for general purposes were not counted again as having a problem with reading for further schooling; it was assumed that the former problem would include the latter. The same principle was applied in the case of writing for general purposes. The basic figures entering into calculations of the frequency of occurrence of each of the four literacy problems were, therefore, four overall school proportions.

Certain schools were excluded from the analysis. As indicated above, unless the ratings were made by a class teacher they were excluded. Furthermore, in some city and town schools (N:11), large enough to have more than one sixth class, not all of the sixth class teachers completed the questionnaire. Since we had no way of knowing whether the classes rated were typical of the school as a whole, it was again not possible to pool the proportions for these classes with those representing entire schools.*

Because of the widely differing degrees of representation in the sample of the population of schools in each category, it was necessary to weight the category means when obtaining the overall mean. The weight applied was computed by dividing the proportion in the sample of schools in that category whose responses met the criteria (all pupils rated by class teachers) and whose proportions, therefore, were included in the category mean. Weights varied from .146 for town girls' schools which were over-represented in the sample as a whole to 2.372 for rural mixed schools which were under-represented.

Results

The mean proportions across schools of pupils judged as having each of the problems with literacy described in the questionnaire are reported in Table 2. Means are reported separately for each category of school. Overall means, both unweighted and weighted are given,

INSERT TABLE 2 ABOUT HERE

along with the 95% confidence intervals for the weighted means.

The figures indicate that we should expect about 6.2% of the pupils in a randomly selected school in the country to be rated by their teachers as experiencing the degree of difficulty with reading described as 'inability to cope with everyday demands'. Because of sampling errors this figure may be as low as 3.8% or as high as 8.6%, but it is unlikely (only 5 chances in 100) that it falls outside this range. Mean percentages for schools grouped by location range from 4.3% for city boys' schools and town girls' schools to 8.4% for rural girls' schools.

The figures in the case of inability to cope with the demands for writing in society are a little higher than in the case of reading; 6.6% (almost certainly not less than 4% or more than 9%) of sixth class pupils in a randomly selected school in the country would be expected to be judged by their teachers as being unable to cope with societal demands for writing if they were to end their schooling with their current year. The lowest percentage, 4.8, is reported for city boys' schools, and the highest, 8.7, for town boys' schools.

As far as reading and writing in the context of further schooling is concerned, for schools on the whole, 7% is a realistic expectation of the number of sixth class pupils who, although they can read well enough to get on in general, would be judged to have problems with reading as a tool for further learning; 5.4 and 8.6% are reasonable lower and upper bounds for this expectation, taking account of sampling errors. City and town schools are highly consistent in judging 4.5 to 6.0% of their pupils as being unable to cope with the reading demands of further schooling. Rural schools vary widely, with boys' schools having the highest proportions of such pupils -- an average of 9.3%.

Somewhat lower proportions of pupils are generally judged to be deficient specifically in the writing skills required for post-primary schooling than are judged to be so in the reading skills. On average, schools could be expected to have about 5.2% (almost certainly not

less than 3.6 or more than 6.8%) of their sixth class pupils judged by teachers to be lacking in the writing skills required for post-primary schooling, although they are judged to be able to write well enough to get on in ordinary daily life. City boys' schools and rural girls' schools report a low incidence of this problem, 1.3 and 1.7%, respectively. The highest means, 5.5 and 5.7% come from town boys' and rural mixed schools, respectively.

CORRELATES OF ILLITERACY

The focus of the second section of this investigation is on a comparison between pupils rated as having literacy problems and those not so rated in terms of standardized test performance and personal-social characteristics. For these comparisons, there is a change in the unit of analysis from the school to the individual pupil.

To compare the characteristics of pupils considered by teachers to have literacy problems, the mean value for pupils who were rated as having each of the four literacy problems was compared with the mean value for pupils not so rated on a number of variables. The variables on which comparisons were made were the pupil's age in months (on 15 October 1975), the pupil's raw score on the sub-tests of the Druncondra English Tests Level III, the pupil's standard score on the Druncondra Verbal Reasoning Test and the ratings of the pupil by the

teacher on twelve personal-social characteristics. Average ratings were calculated for two subsets of these twelve characteristics; eight were regarded as constituting a school characteristics index and four as contributing to a general characteristics index.

In addition, information on two discrete personal-social variables was available. One was the occupational status of the pupil's father; the other was the type of post-primary school which was considered to be most suitable for pupils by their sixth class teacher. Pupils in each literacy problem area were categorized on the basis of these variables.

Finally, the extent to which reading and writing handicaps, at each of the levels described, were related to each other was determined by classifying and counting the pupils who had been rated as having the reading problem only, as having the writing problem only, and as having both problems.

Results

The results from the calculations of the means of age, test scores, and personal-social ratings of pupils who were and were not identified as having each literacy problem are presented in Table 3. The numbers of cases involved in each comparison differ because test and rating information was not available for all pupils.

INSERT TABLE 3 ABOUT HERE

As far as age is concerned, children who have reading and writing difficulties are older than their classmates -- by five to six months in the case of severe difficulties (i.e., for everyday purposes) and by about three months in the case of the less severe difficulties (i.e., for post-primary schooling). This age difference probably reflects a higher incidence of retention among the poorer readers and writers.

Not unexpectedly, markedly low mean attainment test scores were found among the pupils with reading and writing problems. While the mean score of the entire group of pupils was close to the standardization mean (and so near the 50th percentile), pupils with difficulties in reading for everyday purposes had means around the 11 to 12th percentiles of the original distributions. Pupils with problems in writing for everyday purposes had slightly higher means on the attainment test scores (near the 12-14th percentiles), while pupils with milder deficiencies in reading and writing scored near the 18-20th percentiles.

On the Drumcondra Verbal Reasoning Test, pupils with severe reading and writing skill deficits had a standard score of 81 or 82; those with more moderate deficits had a standard score of 90 to 91.

On seven of the twelve personal-social ratings, pupils with the more serious reading and writing difficulties had mean scores of almost exactly 2 (= fair) while their classmates' average ratings were about 3.5 (i.e., average to good); these traits were participation in class, attention and concentration, persistence in school work, keenness to get on, neatness in school work, working with limited supervision, and speech. Six of these characteristics were from the group considered school-related, and the seventh, speech, obviously has a higher cognitive component than the other three in the general characteristics category. For behaviour in class, attendance, personal appearance and dress, manners and politeness, and getting along with other children, the most seriously handicapped pupils averaged scores of 3 to 3.5 (average or better), but their classmates without comparable reading and writing problems scored 4 (= good) or slightly higher on these traits.

An almost identical pattern occurred for the less severely deficient readers and writers. In these cases, however, the means for the pupil behaviours were somewhat higher than in the case of the more handicapped readers and writers though still not as high as for pupils who were not judged to have literacy problems.

The relationship between the incidence of reading and writing skill deficiencies and the occupational status of fathers is shown in Table 4. The number of pupils who had fathers in professional/

managerial or white collar jobs was low among the handicapped

INSERT TABLE 4 ABOUT HERE

readers and writers. Children of skilled and unskilled workers, on the other hand, appeared in each of the problem type categories with roughly the same frequency as they do in the rest of the pupil sample, with a few exceptions. There was a slightly higher incidence of moderate reading disability among children of skilled workers and unskilled workers, of severe writing disability among children of unskilled workers, and of moderate reading and writing disabilities among the children of farmers of small acreage. There was, on the other hand, a slightly lower incidence of moderate writing problems among children of farmers of large acreage. The most startling incidence of handicap was reported for children of fathers who were unemployed, invalided or dead or whose occupations were not reported or not reported accurately by the class teachers; far higher percentages of these pupils had severe and moderate handicaps in reading and in writing than their membership in the total group would have led one to expect.

Sixth class teachers' judgements about the most suitable kind of post-primary school for pupils with the varying degrees of reading and writing disability and with no disability are shown in Table 5.

While, in general, teachers recommended that about 50% of pupils should go to secondary school, 25% to vocational school and 20%

INSERT TABLE 5 ABOUT HERE

to comprehensive school, few pupils (4.2 to 9%) who were perceived as having reading and writing problems were regarded as suitable for secondary schooling. A large number of such pupils (57 to 62%) were, however, regarded as suitable for vocational schooling. For a relatively large number of pupils with literacy problems (16 to 25%) teachers were unsure what kind of post-primary school would be most suitable. It was only in the case of comprehensive schools, that teachers' recommendations did not take reading disability into account, though even here there was a tendency not to recommend such a school for pupils who were perceived as likely to have difficulties in post-primary schools.

The final relationship to be considered is that between having reading difficulty and having writing difficulty at each of the two levels, everyday use and further schooling. Of the pupils rated as having a reading handicap which would leave them unable to cope with

the demands of everyday life, 65% were also reported to have a writing handicap; 22% were judged to have only a writing handicap and 13% to have only a reading handicap. Among pupils judged to have a reading or a writing handicap in coping with the demands of post-primary schooling, 52% were reported to have both handicaps, 38% to have only the reading handicap, and 9% to have only the writing handicap.

DISCUSSION

Our findings indicate that the average percentage of sixth standard pupils per school rated by teachers as being unable to cope with the reading demands of everyday life is about 6%. A further 7% are regarded as unable to read well enough to cope with the demands of post-primary school. The corresponding figures for writing are 6.6 and 5.2%. If we assume that pupils who are unable to cope with everyday demands would also be unable to cope with the demands of post-primary school and if all pupils in sixth classes transfer to such schools, then we would expect that the typical primary school considers 13.2% of pupils going to post-primary school as unable to cope with the reading demands of the school and 11.8% as unable to cope with the writing demands of the school. The problem, obviously, is not an insiginificant one for post-primary schools.

As one would expect, there is considerable overlap between pupils with reading and writing disabilities. Fifty-nine per cent of the pupils with disabilities have them in both the area of reading and writing; 25% have only a reading problem while 16% have a writing problem only.

Our data on the characteristics of poor readers and writers can hardly be regarded as very surprising. Such children tend to be older than other children in their class, while their verbal reasoning scores and their scores on standardized tests of English attainment are considerably below average. On ratings of their personal-social characteristics by teachers, pupils with learning disabilities score considerably lower than other children; that is particularly so for characteristics that are closely related to scholastic performance, such as concentration, persistence and use of language. It is worth noting that for social characteristics, such as manners, class behaviour and getting on with other children, their ratings, while still lower than those for other children, are closer than in the case of more school-related characteristics. Problems associated with literacy, as has been found in many other studies (6) are related to social class membership. These findings on correlates of the problem of literacy serve to underline its complexity. Obviously, the problem does not occur in isolation, but resides in a complex network of personal and social factors.

In conclusion, our findings that teachers perceive problems of literacy to the extent documented in this report, confirm much of the concern that has been expressed about these problems from a variety of sources in recent years. Our data indicate something of the complexity of the problem though they do little to unravel it. While it is normal, and sometimes platitudinous, to end research reports by indicating the need for further research, the seriousness of the problem under consideration, together with our present level of knowledge about it, indicates that in this case, failure to make such a recommendation would be a serious omission. Too many teachers have struggled with the problem for too long, and there is no evidence that simplistic solutions will do much to solve it in the future. Despite the best efforts of a great many teachers, the problem remains and is likely to remain in the future. It seems clear that until we achieve a greater understanding of problems related to learning to read -- which understanding ultimately depends on the availability of more research evidence -- a large number of teachers and pupils are condemned to continue with their present inadequate efforts to cope with such problems.

REFERENCES

1. EDUCATIONAL RESEARCH CENTRE. Drumcondra Attainment Tests, Level III, Form A : Manual. Dublin: Educational Research Centre, St Patrick's College, 1977.

2. EDUCATIONAL RESEARCH CENTRE. Drumcondra Verbal Reasoning Test. Dublin: Educational Research Centre, St Patrick's College, 1968.

3. GREAT BRITAIN: MINISTRY OF EDUCATION. Reading ability. London: HMSO, 1950.

4. NAFZIGER, D.H., THOMPSON, R.B., HISCOX, M.D., and OWEN, T.R. Tests of functional adult literacy : An evaluation of currently available instruments. Portland, Oregon: Northwest Regional Educational Laboratory, 1976.

5. RESNICK, D.P., and RESNICK, L.B. The nature of literacy : An historical exploration. Harvard Educational Review, 1977, 47 370-385.

6. SEITZ, V. Social class and ethnic group differences in learning to read. Newark, Delaware: International Reading Association, 1977.

FOOTNOTE (p.6)

*In a number of cases, one field worker obtained ratings from principal teachers or from a remedial teacher, instead of from class teachers. An additional 14 teachers were represented by such ratings, bring the total percentage of classes rated to 80%. Altogether, 529 pupils were rated by their principal or remedial teacher, bringing the total of [illegible]ls rated to 81% of the entire pupil sample. Our reported analyses will be confined to ratings made by class teachers, since we cannot be sure that other teachers who rated children used the same standard of judgement as the class teacher.

FOOTNOTE (p.9)

*In schools where the pupils were rated by the principal or remedial teacher, a far smaller proportion of the pupils were considered to have the reading problem under discussion. The mean proportions in schools where only some of the classes were rated differ from those of other schools in their categories quite markedly and in different directions. These variations probably spring from differences in the characteristics of the particular classes rated, e.g., average or typical classes in some schools and a lower ability class in others; they justify our not including such schools in the overall means.

TABLE 1

Characteristics of the School Population, the Sample, and the Respondents

School type	Schools in population	Schools in sample	Sixth standard teachers in sample	Sixth standard pupils in sample	Schools responding In full	Schools responding In part	Sixth standard teachers responding In full	Sixth standard teachers responding In part	Sixth standard pupils rated In full	Sixth standard pupils rated In part
City Boys (4+ teachers)	146	20	52	1,836	12		27		935	
					4**	3	(12)†	4	(429)††	129
City Girls (4+ teachers)	105	18*	40	1,445	13		28		974	
					1**	1	(2)†	2	(100)††	82
Town Boys (4+ teachers)	125	18	33	1,178	12	4	17	5	650	176
Town Girls (4+ teachers)	63	19*	35	1,222	14	3	25	5	884	150
Rural Boys (2-6 teachers)	149	8	8	131	8		8		131	
Rural Girls (2+ teachers)	71	5	5	83	4		4		67	
Rural Mixed (2+ teachers)	2,158	36	36	518	30		30		456	
SUBTOTAL	2,817	124	210	6,413	93	11	139	16	4,097	537
					5**		(14)†		(529)††	
City and town, mixed (3+ teachers)	247	4	4	111	3	0	3	0	102	0
Other	123	0	0	0	0	0	0	0	0	0
TOTAL	3,187	128	214	6,524	96	11	142	16	4,199	537
					5**		(14)†		(529)††	

* One of these schools had no sixth standard class and could not, therefore, respond.

** Schools in which the principal or remedial teacher rated all sixth class pupils.

† The number of teachers represented by a principal or remedial teacher's having rated all sixth-class pupils in schools.

†† The number of sixth-class pupils rated by a principal or remedial teacher instead of by their class teacher.

TABLE 2

Mean Percentages of Pupils Reported as Having Each of Four Problems with Literacy

School type	Number of schools	Number of pupils		Literacy problem			
		Range	Total	Reading–general	Writing–general	Reading–schooling	Writing–schooling
City Boys	12	14-145	935	4.3	4.8	4.8	1.3
City Girls	13	11-156	974	6.4	6.7	4.5	4.2
Town Boys	12	33-128	650	8.1	8.7	6.0	5.5
Town Girls	14	27-118	884	4.3	5.4	5.6	3.5
Rural Boys	8	7-25	131	5.2	5.4	9.3	4.7
Rural Girls	4	8-29	67	8.4	8.4	0	1.7
Rural Mixed	30	4-33	456	6.3	6.6	7.5	5.7
UNWEIGHTED MEANS	93		4097	6.0	6.5	6.1	4.3
WEIGHTED MEANS (95% confidence interval)	93			6.2 (.038-.088)	6.6 (.042-.090)	7.0 (.054-.086)	5.2 (.036-.068)

TABLE 3

Mean Test Scores and Personal–Social Characteristics Ratings of Pupils Rated as Having or Not Having Reading and Writing Difficulties

Variable	Number of pupils	Type and degree of difficulty					
		Reading			Writing		
		Severe	Moderate	None	Severe	Moderate	None
	Total number in tested respondent schools	(218)	(217)	(3758)	(245)	(145)	(3803)
	Total number in pupil file	(196)	(199)	(3535)	(216)	(137)	(3577)
	Total number for age	(192)	(199)	(3438)	(213)	(137)	(3479)
Age		148.1	145.3	142.1	147.4	145.2	142.2
	Total number for attainment tests	(120)	(150)	(2180)	(145)	(105)	(2200)
English reading vocabulary		15.3	19.2	31.2	16.5	20.7	30.9
English reading comprehension		16.7	21.6	30.9	17.2	22.4	30.8
English reading total		31.8	41.6	62.2	33.7	43.1	61.9
English language		32.4	37.2	50.2	33.2	37.9	50.0
English spelling		27.8	30.8	38.9	28.4	31.4	38.8
	Total number for ability test	(163)	(178)	(3171)	(178)	(126)	(3208)
Verbal reasoning		81.4	90.1	106.3	81.9	91.0	106.1
	Total number for ratings	(145)	(165)	(2905)	(165)	(110)	(2940)
Participation in class		1.9	2.4	3.7	2.0	2.4	3.7
Behaviour in class		3.0	3.4	4.2	3.1	3.5	4.1
Attention, concentration		1.8	2.1	3.6	1.8	2.2	3.6
Persistence in school work		1.8	2.2	3.6	1.8	2.2	3.6
Keenness to get on		1.9	2.4	3.7	1.9	2.4	3.7
Neatness in school work		2.0	2.4	3.7	2.1	2.3	3.7
Working with limited supervision		1.9	2.2	3.6	1.9	2.3	3.6
Attendance		3.5	3.8	4.4	3.6	3.8	4.4
School characteristics average		2.2	2.6	3.8	2.3	2.6	3.8
Personal appearance, dress		3.2	3.7	4.3	3.3	3.8	4.3
Speech		2.0	2.5	3.7	2.1	2.4	3.7
Manners, politeness		3.2	3.5	4.3	3.4	3.6	4.2
Getting along with other children		3.1	3.6	4.1	3.2	3.6	4.0
General characteristics average		2.9	3.3	4.1	3.0	3.3	4.1

TABLE 4

Occupational Status of Fathers of Pupils Rated as Having or Not Having Reading and Writing Difficulties

Occupational Status	Type and degree of difficulty					
	Reading			Writing		
	Severe (148)	Moderate (169)	None (3025)	Severe (169)	Moderate (112)	None (3061)
Professional/managerial	4.7	1.8	8.6	3.6	2.7	8.5
Middle-class/white collar	4.1	8.3	18.9	4.1	8.9	18.8
Skilled worker	23.6	29.6	25.8	24.9	24.1	26.0
Unskilled worker	20.3	22.5	18.8	23.7	19.6	18.8
Farmer, ≥50 acres	4.1	1.2	3.7	3.0	3.6	3.7
Farmer, <50 acres	4.7	10.7	4.6	2.4	10.7	4.8
Unemployed, invalid, unreported, unclassifiable	34.5	21.9	17.5	33.7	26.8	17.3
Dead	4.1	3.6	2.1	4.7	3.6	2.1

TABLE 5

Teacher Judgement of Most Suitable Type of Post-primary School for Pupils Rated as Having or Not Having Reading and Writing Difficulties

Type of post-primary school	Type and degree of difficulty					
	Reading			Writing		
	Severe (144)	Moderate (158)	None (2894)	Severe (161)	Moderate (100)	None (2935)
Secondary	4.2	7.0	52.2	5.0	9.0	51.5
Vocational	60.4	59.5	24.3	61.5	57.0	24.8
Comprehensive	17.4	13.3	18.4	18.0	9.0	18.4
Too soon to tell	18.1	20.3	5.0	15.5	25.0	5.2